net now

THEY'RE PLAYING YOUR SONG

Following the fall of Napster, music-loving Netheads are getting itchy for a way to get their fix. There are a few alternatives, including peer-to-peer technologies such as Gnutella *(gnutella.wego.com)* and Aimster *(www.aimster.com)*, but the corporate world is already pursuing ways to squelch them.

One alternative that may dodge the long arm of the record labels is the Bitbop Tuner *(www.bitbop.com)*. This technology allows users to record music directly from Internet radio stations. Bitbop Tuner monitors the stations in real time, then automatically records designated tunes. Music mavens can leave the program running all day, then return to see the list of songs the program recorded.

Unlike MP3s, Bitbop's recordings are personal and recorded in a proprietary format; they can't be copied to MP3 players or other PCs, which may pacify the record labels. Depending on the speed of the Internet connection and the quality of the RealAudio stream from which it records, the sound quality can be lower than what MP3 files typically offer.

It's unclear whether Bitbop will rankle the music companies. "A lot of the radio stations that are providing content online don't have a right to do so, or are relying on interpretations of the law that haven't been tested in court," says Ian Poynter, president of Internet-security firm Jerboa and an expert in digital rights management. Earlier this year, dozens of legitimate radio stations voluntarily turned off their streaming Internet feeds because certain legalities were unclear.

Poynter is confident that these issues will be resolved. "The content producers aren't going to produce content if they know it is going to be available out there for nothing," he says. *—Kevin Savetz*

ILLUSTRATION BY BEK SHAKIROV

Flat-Panel Fire Sale

In response to the flood of LCD panels on the market, several vendors have significantly reduced prices, with some 15-inch LCDs going for less than $500, and 17-inchers for roughly $1,000.

It's a particularly good time to snap up a 15-inch model. **Samsung Electronics** offers its SyncMaster 570vTFT for $499, **ViewSonic's** VE150m ViewPanel sells for the same price, and **IBM** broke $500 (with the purchase of an IBM system) with its T540 unit. Just slightly more costly is **NEC-Mitsubishi Electronics Display's** NEC MultiSync LCD1530V, at $549.

Flat-panel prices flatten out.

These prices are six months ahead of last year's predictions, according to Ross Young, president of research firm DisplaySearch. "We thought we'd get to the $500 mark by the end of the year, and we're already there," he says.

Frank Giacomelli, retail marketing program manager for Samsung, anticipates 15-inch LCD prices reaching $399 and 17-inch units dropping to $700 by early third quarter.

By the end of 2001, however, prices could increase.

"Panel manufacturers will raise costs, because the current prices are not sustainable," says Young, explaining that panel manufacturers can't afford to continue producing a significant volume of large flat panels. Some panel makers are leaving the market, and others are switching production to LCDs for mobile devices.

But according to Herb Berkwits, senior LCD product manager for ViewSonic, a small increase in LCD-panel prices shouldn't affect monitor prices. "We don't envision that the monitor price would go up if the component price went up slightly," he says. *—Brian T. Horowitz*

ONLINE PHOTO FINISHING

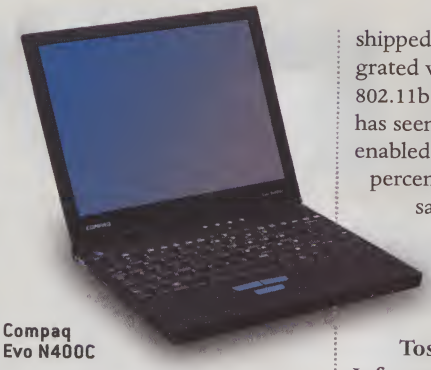
What you'll pay for 24 4-by-6-inch prints

	Film-Processing Cost	Cost for Individual Prints (4-by-6)	Shipping/ Handling*	Extras	Total Cost for a Roll of 24 Prints
Snapfish	$1.99 (entire roll)	None (59 cents for additional prints)	$1.99	First three rolls free (excluding shipping)	$3.98
PhotoWorks	$7.45 (15 to 27 prints)	None (50 cents for additional prints)	$1.75	Optional photos-on-DVD service	$9.20
DotPhoto	$3.99	29 cents	$1.99	Subscription plans, one free roll per month	$12.94
Ofoto	$2.95	49 cents	$2.49	First two rolls free, 25 free prints for joining	$17.20
Shutterfly	$4.79	49 cents	$1.99	15 free prints for joining	$18.54

* = including postage-paid mailers

NET NOW

Wireless Notebooks, Widespread At Last



Compaq Evo N400C

Portable computers become much more useful when you can wirelessly tap into the Web or a corporate network. Last year, **Apple Computer** introduced its AirPort cards, and major notebook vendors have followed Apple's lead.

Most recently, **Compaq Computer** introduced the Evo N400c, which accommodates a variety of modules for wireless access, including units for 802.11b (wireless LAN), Bluetooth, and, by next year, wide-area networking.

"The number-one reason why people buy PCs is Internet access," says Matthew Wagner, a marketing manager in Compaq's Presario Mobile Group. "Wireless Internet access is the logical next step."

Not to be outdone by its archrival, **Dell Computer** has embraced wireless in a big way. The company, which has shipped notebooks with integrated wireless antennas and 802.11b cards since September, has seen sales of wireless-enabled notebooks grow 50 percent month over month, says Murray McKerlie, Dell's marketing manager for wireless products.

Similarly, **Toshiba America Information Systems** introduced its 802.11b-enabled Tecra 8200, and **IBM** announced plans to integrate 802.11b support in select models of its A- and I-series ThinkPads by building an antenna directly into the notebooks' screens.

On the heels of support for 802.11b, many computer manufacturers are finally beginning to embrace Bluetooth technology. For instance, Dell ships a Bluetooth PC Card for its Inspiron line, Toshiba offers optional Bluetooth support on the Tecra 8200, and Bluetooth cards are available for select IBM notebooks. But Bluetooth's future is a bit uncertain, following Microsoft's announcement that it would not support the technology in its upcoming Windows XP operating system.

Notebook vendors are even starting to bundle options for wide-area-network technologies. Compaq's Presario 800, for instance, offers an optional $299 Novatel Wireless Merlin Ricochet PC Card for high-speed wireless Internet access through Metricom's 15-city Ricochet network. The service isn't cheap, however—you'll pay $74.95 per month.

—Adam Fisher

If You're Getting Whipped, Just Say You Lost the Connection

You're in the Colosseum in ancient Rome, doing battle with a bloodthirsty gladiator. The latest game for the PlayStation2? Hardly. It's a popular game available only on a Web-enabled wireless phone, and your enemy is actually your friend Bob.

Players of Gladiator ***(www.jamdat.com/html/gladiator.html)*** have logged more than 1.5 million sessions, driving 7 million minutes of airtime, even though the game uses 1-bit graphics on a 1-inch-square screen. (Although it's possible to play wireless games on a PDA, the most common platform is the cell phone.)

And Gladiator is just one of hundreds of wireless multiplayer games, which are proving popular despite the technical limitations of tiny screens and very slow connections. Both games and handsets are improving, according to Becky Diercks, director of wireless research at market-research firm Cahners In-Stat. "We're starting to see larger displays on handsets, and color [screens]," she says. "As these improve, the number of people using games will increase dramatically."

Today, there are 1.5 million wireless Internet users in the United States. It's impossible to get firm statistics about how many of those play wireless games, but 10- to 25-year-olds are estimated to be the primary users. "People 25 and older try them but don't talk about them as much," Diercks says.

Itty bitty gladiators at play

—Kevin Savetz

CONSUMER REPORTS TO GO

The next time a high-pressure salesperson tries to talk you into an expensive new DVD player, whip out your PDA or smart phone and do some fast research. *Consumer Reports* ***(www.consumerreports.org)*** has partnered with wireless information service **AvantGo *(www.avantgo.com)*** to provide free buying advice on electronics and appliances to AvantGo subscribers.

"It makes it easier to have that information available at the point of purchase," explains John Sateja, general manager of Consumer Reports Online.

According to Sateja, AvantGo subscribers can download the information with no special setup required. He says that focus-group participants have found the service easy to use, allaying concerns that users wouldn't be able to navigate the detailed listings and ratings smoothly.

Take-along buying assistant

Shoppers will probably be disappointed to learn that only the first phase of the rollout is free. Available information will include buying advice on electronics and appliances, which are *Consumer Reports'* most popular topics. Sateja says that by October, AvantGo and *Consumer Reports* plan to offer subscriptions to paid *Consumer Reports* content, which will include the publisher's well-known product- and service-rating reports.

—Gwen Moran